

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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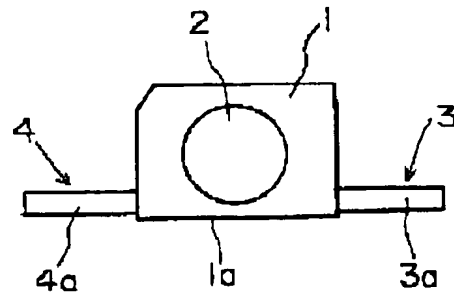
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APPLICANT : ROHM CO LTD;

INVENTOR : OSAWA EIJI;

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TITLE : RESIN SEALED TYPE  
SEMICONDUCTOR DEVICE



**ABSTRACT :** **PURPOSE:** To obtain a device which has reduced the occupied area on a substrate at the time of loading the parts by extending the lead terminal pieces in such a direction that the flat surface of the lead terminal piece almost orthogonally crosses the bottom surface of the resin sealing portion in the manner that the lower surface of side end of the lead terminal piece is almost in same plane as the bottom surface thereof.

**CONSTITUTION:** A semiconductor element is resin-sealed and lead terminal pieces 3, 4 are extended from a resin sealing area 1. In such a semiconductor device, the lead terminal pieces 3, 4 are extended in such a direction that the flat surfaces 3a, 4a of the lead terminal pieces 3, 4 are almost orthogonally crossing the bottom surface 1a of the resin sealing area 1 in the manner that the lower surfaces 1a of the side end of the lead terminal pieces 3, 4 are almost in the same plane as the bottom surface 1a. For example, the resin sealing area 1 is formed as an LED package of the flat rectangular parallelepiped shape where the upper and lower surfaces are smaller than the side surfaces with a lens 2 projected at the side surface. Moreover, the externally extending portions of lead terminal pieces 3, 4 are arranged in such a manner that the flat surfaces 3a, 4a which is wider in comparison with plate thickness are almost orthogonally crossing the bottom surface 1a of the resin sealing area 1 and the lower surface of side end is almost in the same plane as the bottom surface 1a.

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